

Kiracofe, Brandon (DEQ)

From: Kiracofe, Brandon (DEQ)
Sent: Thursday, November 13, 2014 4:06 PM
To: 'jbiggs46@yahoo.com'
Subject: Lexington-Rockbridge Regional WQCF, VPDES Permit No. VA0088161

Ms. Biggs,

Your application has been reviewed and appears to be complete. The next steps involve holding a public informational meeting regarding the new land application sites and assembling the information necessary to draft the permit. Once the draft permit is prepared and the appropriate reviews are performed, I will transmit the draft permit and supporting documentation to you for review. I expect to have this draft permit package to you within the next 45 days.

The Department of Environmental Quality strives to complete the permitting process in a timely manner. If you have any questions about our procedures or the status of your draft permit, please do not hesitate to contact us.

Sincerely,
Brandon Kiracofe

Brandon D. Kiracofe
Water Permits & Compliance Manager
DEQ - Valley Regional Office
4411 Early Road, Harrisonburg, VA
Harrisonburg, VA 22801
Office: (540) 574-7892 FAX: (540) 574-7878
brandon.kiracofe@deq.virginia.gov
Web: www.deq.virginia.gov
Mail: P.O. Box 3000, Harrisonburg, VA 22801

Carver, Beverley (DEQ)

From: Carver, Beverley (DEQ)
Sent: Friday, August 15, 2014 10:17 AM
To: Joan Biggs (jbiggs46@yahoo.com)
Cc: Showman, Keith (DEQ)
Subject: Permit Application - Lexington Rockbridge Regional WQCF - VA0088161

Hi Joan,

As you know, the permit application was due on August 4, 2014. You submitted the application early on July 3, 2014. Thank you! I know you and Keith have been diligently working on the biosolids portion of the application and that there is still information which must be submitted. I will continue working on the parts of the draft permit which are not related to the biosolids section. Once all the biosolids information is submitted, then I will send you an application complete letter. Just keep focusing on getting the needed information to Keith is all you need to worry about.

If you have any questions, let me know.

Bev

Beverley W. Carver
Water Permit Writer Senior
Department of Environmental Quality
Valley Regional Office
4411 Early Road, Harrisonburg, VA
Phone: (540) 574-7805 FAX: (540) 574-7878
email: Beverley.Carver@deq.virginia.gov
web: www.deq.virginia.gov
Mail: P.O. Box 3000, Harrisonburg, VA 22801

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY

VALLEY REGIONAL OFFICE

4411 Early Road - P.O. Box 3000

Harrisonburg, VA 22801

SUBJECT: Application Errata for VPDES Permit No. VA0088161 Lexington-Rockbridge Regional WQCF, Rockbridge County

TO: PP File

FROM: Bev Carver

DATE: July 3, 2014

All application requirements related to biosolids will be reviewed separately by Keith Showman. This review was limited to all application requirements other than the biosolids requirements.

The following deficiencies were noted in the subject permit reissuance application:

EPA Form 2A:

- Part A.12. – The Outfall number is 001.
- Part D. Expanded Effluent Testing Data – Three scans for all of the parameters listed in Part D have been previously submitted, reviewed and are in the DEQ files. A summary of the data will be presented in the 2014 Fact Sheet.

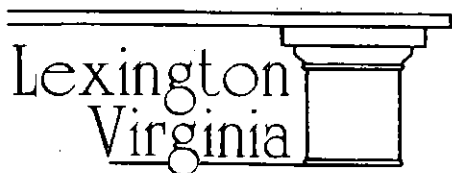
Application Addendum: No deficiencies found.

No Exposure Certification Form: No deficiencies found.

Annual Permit Maintenance Fee Form: An email will be sent to Joan Biggs to submit this form.

The deficiencies noted are insignificant and will not affect the preparation of a legally and technically defensible draft permit.

Reviewer Concurrence: DMG 7-7-14



July 2, 2014

DEQ VALLEY

JUL 03 2014

To: _____ *Blw*
Date: _____

Ms. Beverley W. Carver
Environmental Engineer Senior
Virginia Department of Environmental Quality
PO Box 3000
Harrisonburg, VA 22801

Re: VA0088161 Permit Renewal NPDES Form 2A

Dear Bev,

The following completed documents are enclosed for our permit renewal:

- NPDES Form 2A
- Attachments to Form 2A
- VPDES Permit Application Addendum
- Public Notice Billing Information
- Virginia DEQ No Exposure Certification

If you have any questions, please call.

Yours truly,


Joan H. Biggs
Lab Specialist

Enclosures

Form 2A Attachments

Item B2 (p 7)

- Attachment I, p1 – Topo map
- Attachment I, p2 – Aerial map
- Attachment I, p3 – Piping
- Attachment I, p4 – Vicinity map

Item B3 (p7)

- Attachment II, p1 - Liquid process
- Attachment II, p1A – Liquid upgrade
- Attachment II, p2 – Solids process
- Attachment II, p2A – Solids upgrade

DEQ VALLEY

JUL 03 2014

To: _____
Date: _____

VPDES Permit Application Addendum

1. Entity to whom the permit is to be issued: Maury Service Authority
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2. Is this facility located within city or town boundaries? ☒ YES ☐ NO
Include a topographic map identifying the location of the facility, the property boundaries, and the discharge point.
3. What is the tax map parcel number for the land where this facility is located? 76B-1-1 76B-2-A,B
4. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? No planned construc
5. **ALL FACILITIES:** What is the design average flow of this facility? 3.0 MGD
Industrial facilities: What is the maximum 30-day avg. production level (include units)? NA

In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? ☒ YES ☐ NO

If "Yes", please specify the other flow tiers (in MGD) or production levels: 6.0

Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

6. Nature of operations generating wastewater:
Residences, schools, food operations, motels, laundries, microbrewery; domestic wastewater composition
- >99 % of flow from domestic connections/sources
Number of private residences to be served by the wastewater treatment facilities: ☐ 0 ☐ 1-49 ☒ 50 or more
- <1 % of flow from non-domestic connections/sources

7. Mode of discharge: ☒ Continuous ☐ Intermittent ☐ Seasonal
Describe frequency and duration of intermittent or seasonal discharges:

8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

- ☒ Permanent stream, never dry
☐ Intermittent stream, usually flowing, sometimes dry
☐ Ephemeral stream, wet-weather flow, often dry
☐ Effluent-dependent stream, usually or always dry
☐ Lake or pond at or below the discharge point
☐ Other: _____

DEQ VALLEY

JUL 03 2014

To: _____

Date: _____

9. Consent to receive electronic mail

The Department of Environmental Quality (DEQ) may deliver permits, certifications and plan approvals to recipients, including applicants or permittees, by electronically certified mail where the recipients notify DEQ of their consent to receive mail electronically (§ 10.1-1183). Check *only one* of the following to consent to or decline receipt of electronic mail from DEQ as follows:

- ☒ Applicant or permittee agrees to receive by electronic mail the permit and any plan approvals associated with the permit that may be issued for the proposed pollutant management activity, and to certify receipt of such electronic mail when requested by the DEQ.

Please provide email: rallen@lexingtonva.gov

- ☐ Applicant or permittee declines to receive by electronic mail the permit and any plan approvals associated with the permit that may be issued for the proposed pollutant management activity.

Disclaimer

This is an updated PDF document that allows you to type your information directly into the form and to save the completed form. This form is the most updated form currently available.

Note: This form can be viewed and saved only using Adobe Acrobat Reader version 7.0 or higher, or if you have the full Adobe Professional version.

Instructions:

1. Type in your information
2. Save file (if desired)
3. Print the completed form
4. Sign and date the printed copy
5. Mail it to the directed contact.

DEQ VALLEY

JUL 03 2014

To: _____

Date: _____

FORM
2A
NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow \geq 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Lexington-Rockbridge Regional WQCF - VA0088161

BASIC APPLICATION INFORMATION**PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:**

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name Lexington-Rockbridge Regional Water Quality Control Facility (WQCF)

Mailing Address PO Box 922
Lexington, VA 24450

Contact person Richard L. Allen

Title Director of Utilities Processing Department

Telephone number (540) 463-3566

Facility Address 135 Bob Akins Circle
(not P.O. Box) Lexington, VA 2450

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name Maury Service Authority

Mailing Address PO Box 785
Lexington, VA 24450

Contact person Richard L. Allen

Title Director of Utilities Processing Department, City of Lexington

Telephone number (540) 463-3566

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☐ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☒ facility ☐ applicant**A.3. Existing Environmental Permits.** Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0088161 PSD _____

UIC _____ Other VAN040068

RCRA _____ Other _____

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>Lexington City</u>	<u>7200</u>	<u>Separate</u>	<u>Municipal</u>
<u>Rockbridge County</u>	<u>2409</u>	<u>Separate</u>	<u>Municipal</u>
<u>Total population served 9609</u>			

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Lexington-Rockbridge Regional WQCF - VA0088161

A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 3.0
- mgd

	Two Years Ago	Last Year	This Year
b. Annual average daily flow rate	<u>1.034 6/2011-5/2012</u>	<u>.974 6/2012-5/2013</u>	<u>.993 6/2013-5/2014</u> mgd
c. Maximum daily flow rate	<u>4.102</u>	<u>3.445</u>	<u>3.080</u> mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100% %

☐ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1

ii. Discharges of untreated or partially treated effluent 0

iii. Combined sewer overflow points 0

iv. Constructed emergency overflows (prior to the headworks) 0

v. Other NA

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

FACILITY NAME AND PERMIT NUMBER:
Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

NA

If transport is by a party other than the applicant, provide:

Transporter name: NA

Mailing Address:

Contact person: NA

Title:

Telephone number:

For each treatment works that receives this discharge, provide the following:

Name: NA

Mailing Address:

Contact person: NA

Title:

Telephone number:

If known, provide the NPDES permit number of the treatment works that receives this discharge.

Provide the average daily flow rate from the treatment works into the receiving facility.

NA mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

Yes

No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method:

Is disposal through this method

continuous or

intermittent?

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

- a. Outfall number 001
- b. Location NA
(City or town, if applicable) Rockbridge (Zip Code) VA
(County) N 37 47 24 (State) W 79 25 1.5
(Latitude) (Longitude)
- c. Distance from shore (if applicable) NA ft.
- d. Depth below surface (if applicable) NA ft.
- e. Average daily flow rate 1.0 mgd
- f. Does this outfall have either an intermittent or a periodic discharge?
 Yes ✓ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: NA
- Average duration of each discharge: NA
- Average flow per discharge: NA mgd
- Months in which discharge occurs: NA
- g. Is outfall equipped with a diffuser? Yes ✓ No

- a. Name of receiving water Maury River
- b. Name of watershed (if known) Middle Maury River/Mill Creek
- United States Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin (if known): Upper James
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____
- d. Critical low flow of receiving stream (if applicable):
acute _____ cfs chronic _____ cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): Unknown mg/l of CaCO_3

FACILITY NAME AND PERMIT NUMBER:
Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

☒ Primary ☒ Secondary
☐ Advanced ☒ Other. Describe: Nutrient Removal

b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal >85 %
Design SS removal >85 %
Design P removal 0.5 mgLBasis of design %
Design N removal 6.0 mgLBasis of design %
Other _____ %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

UV d. cascade aeration following UV

If disinfection is by chlorination, is dechlorination used for this outfall? ☐ Yes ☒ No

d. Does the treatment plant have post aeration? ☒ Yes ☐ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: _____

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.1	s.u.			
pH (Maximum)	8.0	s.u.			
Flow Rate	3.080		0.967	mgd	273 (6/22/13-3/21/14)
Temperature (Winter)	14	C	9.3	C	90(12/22/13-3/21/14)
Temperature (Summer)	26.3	C	24	C	92(6/22/13-9/21/13)

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	3	mgL	2	mgL	39	5210 B 2001	
	CBOD-5							
FECAL COLIFORM		84.2 ecoli	mpn/C ml	20.4	mpn/C ml	12	Colilert	UV-Reported e. coli
TOTAL SUSPENDED SOLIDS (TSS)		2.7	mgL	2.0	mgL	9	2540 D 1997	

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

100,000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

Monitoring and identifying areas that contribute most to inflow/infiltration and replacing older lines.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g. chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: NA

Mailing Address: _____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

NA

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

Yes ☐ No ☐

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Lexington-Rockbridge Regional WQCF - VA0088161

- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule	Actual Completion
	MM / DD / YYYY	MM / DD / YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc	Units	Conc	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	0	mgL	0	mgL	4	350.1 (1993)	.1 mgL
CHLORINE (TOTAL RESIDUAL, TRC)	NA						
DISSOLVED OXYGEN	11.3	mgL	9.8	mgL	30	4500-O-G 2001	
TOTAL KJELDAHL NITROGEN (TKN)	1.1	mgL	.91	mgL	4	351.2 1993	.50 mgL
NITRATE PLUS NITRITE NITROGEN	3.6	mgL	3.2	mgL	4	4100 B 2000	.20 mgL
OIL and GREASE	ND	mgL	ND	mgL	1	EPA 1664 Rev A	5.0 mgL
PHOSPHORUS (Total)	.08	mgL	.07	mgL	4	4500-P BE 1999	.05 mgL
TOTAL DISSOLVED SOLIDS (TDS)	372	mgL	372	mgL	1	2540 1997	10 mgL
OTHER							

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:



Basic Application Information packet

Supplemental Application Information packet:



Part D (Expanded Effluent Testing Data)



Part E (Toxicity Testing: Biomonitoring Data)

Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Richard L. Allen, Director, Utilities Processing Department

Signature

Richard L. Allen

Telephone number

(540) 463-3566

Date signed

7-1-14

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Lexington-Rockbridge Regional WQCF - VA0088161

SUPPLEMENTAL APPLICATION INFORMATION**PART D. EXPANDED EFFLUENT TESTING DATA**

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 PrevSub (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		

METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.

ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO ₃)											

Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 PrevSub (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYL VINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Lexington-Rockbridge Regional WQCF - VA0088161

Outfall number: 001 PrevSub (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 PrevSub. (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc	Units	Mass	Units	Conc	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GH)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086Outfall number: 001 PrevSub (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086**SUPPLEMENTAL APPLICATION INFORMATION****PART E. TOXICITY TESTING DATA**

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

☒ chronic ☐ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: _____ Test number: _____ Test number: _____

a. Test information.

Test species & test method number	Data Previously Submitted		
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			

b. Give toxicity test methods followed.

Manual title			
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite			
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection			
After dechlorination			

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

Test number: _____

Test number: _____

Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

Salinity

Temperature

Ammonia

Dissolved oxygen

l. Test Results.

Acute:

Percent survival in 100%
effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

 Yes ☒ No If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

Previously submitted for August 2009 - August 2013

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

☐ Yes ☒ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 0

b. Number of CIUs. 0

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (☐ continuous or ☐ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (☐ continuous or ☐ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☐ Yes ☐ No

b. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ☐ Yes ☐ No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

☐ Truck ☐ Rail ☐ Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number

Amount

Units

<u>EPA Hazardous Waste Number</u>	<u>Amount</u>	<u>Units</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.) ☐ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous

☐ Intermittent

If intermittent, describe discharge schedule.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:
Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

- Outfall number _____
- Location _____
(City or town, if applicable) (Zip Code) _____
(County) (State) _____
(Latitude) (Longitude) _____
- Distance from shore (if applicable) _____ ft.
- Depth below surface (if applicable) _____ ft.
- Which of the following were monitored during the last year for this CSO?
____ Rainfall ____ CSO pollutant concentrations ____ CSO frequency
____ CSO flow volume ____ Receiving water quality
- How many storm events were monitored during the last year? _____

G.4. CSO Events.

- Give the number of CSO events in the last year.
_____ events (____ actual or ____ approx.)
- Give the average duration per CSO event.
_____ hours (____ actual or ____ approx.)

FACILITY NAME AND PERMIT NUMBER:

Lexington-Rockbridge Regional WQCF - VA0088161

Form Approved 1/14/99
OMB Number 2040-0086

- c. Give the average volume per CSO event.
_____ million gallons (_____ actual or _____ approx.)
- d. Give the minimum rainfall that caused a CSO event in the last year.
_____ inches of rainfall

G.5. Description of Receiving Waters.

- a. Name of receiving water: _____
- b. Name of watershed/river/stream system: _____
- United States Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin: _____
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

Figure B-2: Solids Train Diagram

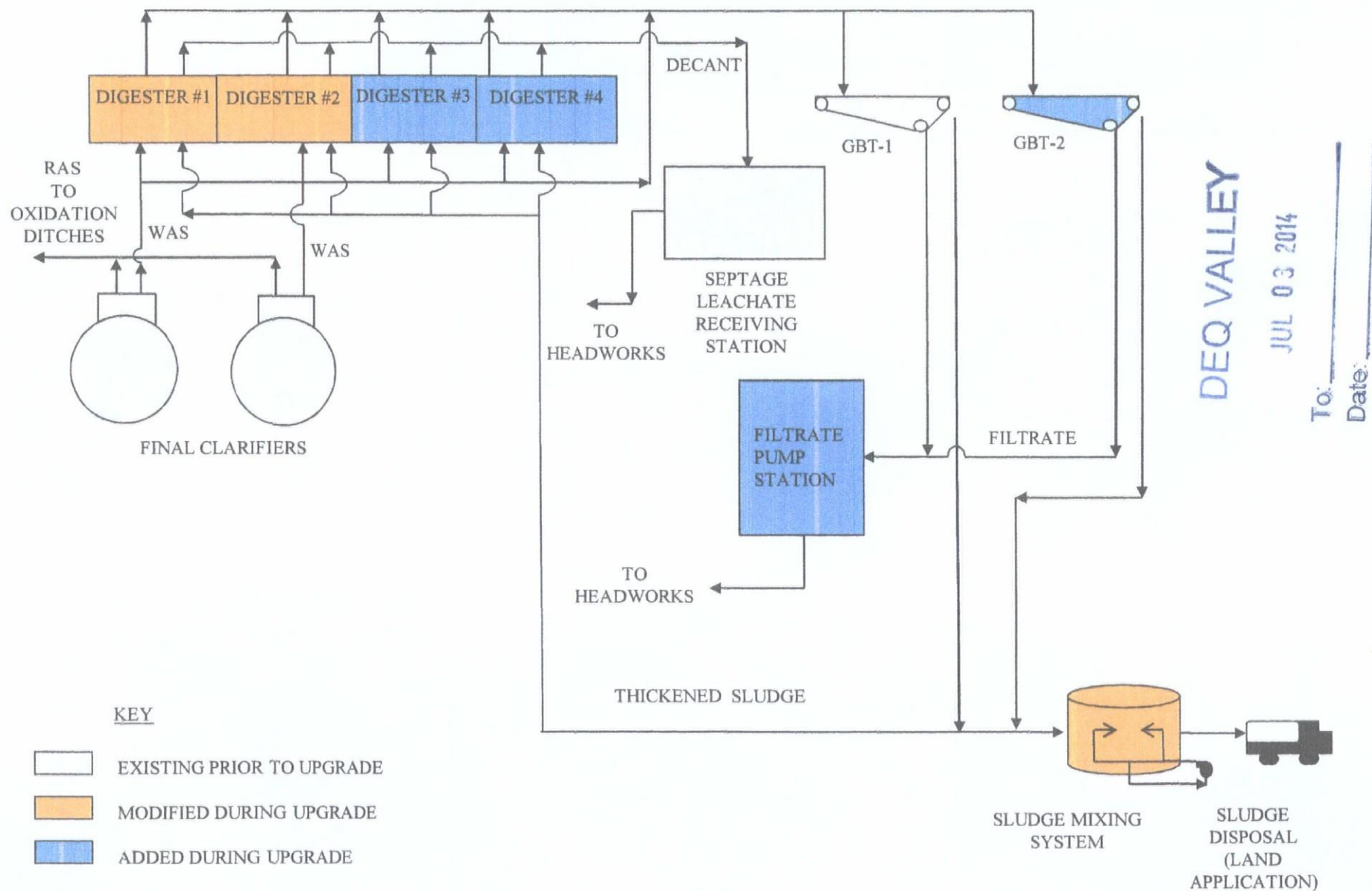
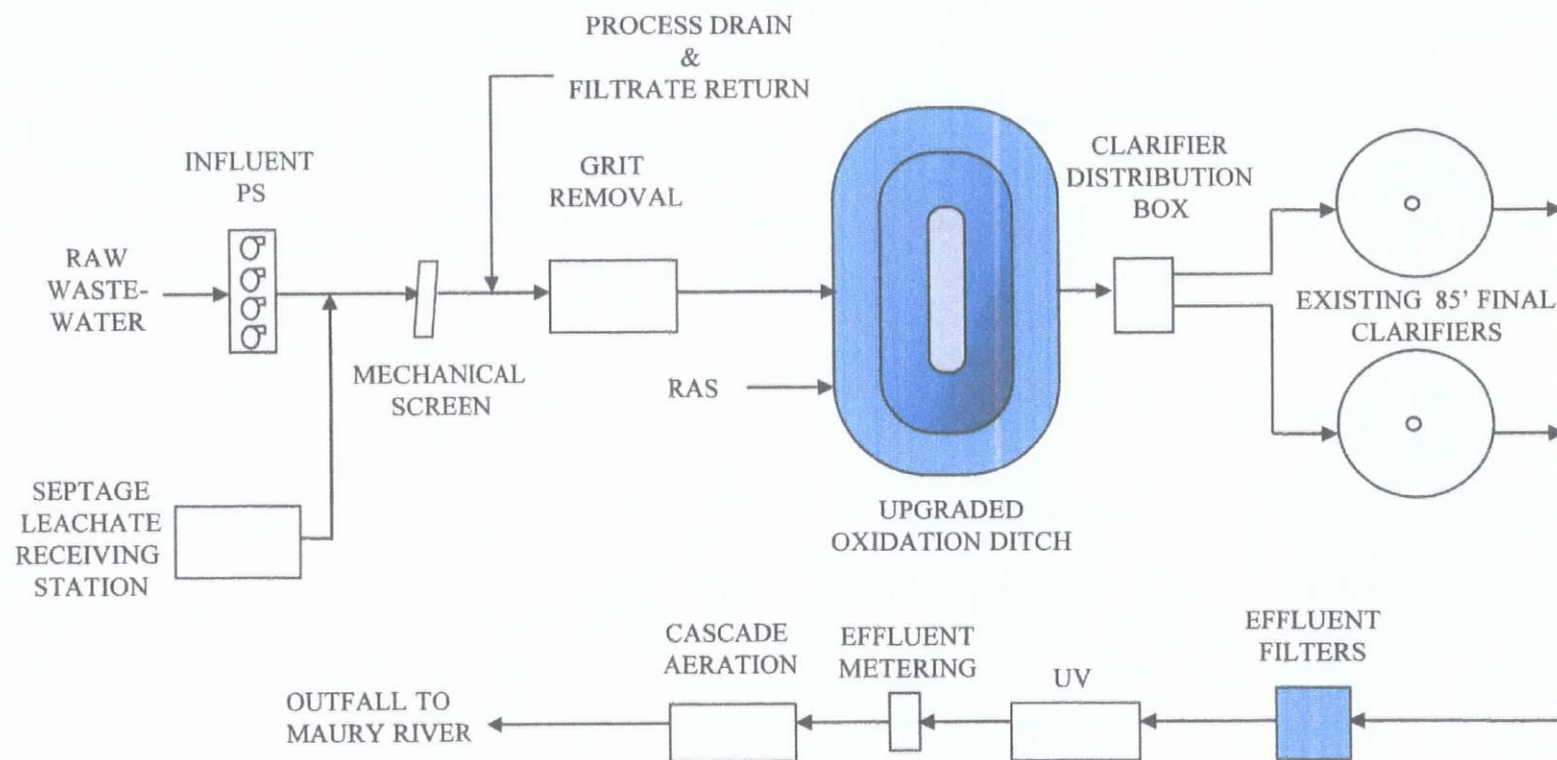


Figure B-1: Liquid Train Diagram

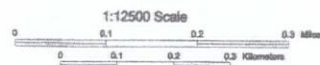
**KEY**

 EXISTING PRIOR TO UPGRADE

 UPGRADE

 PUMP



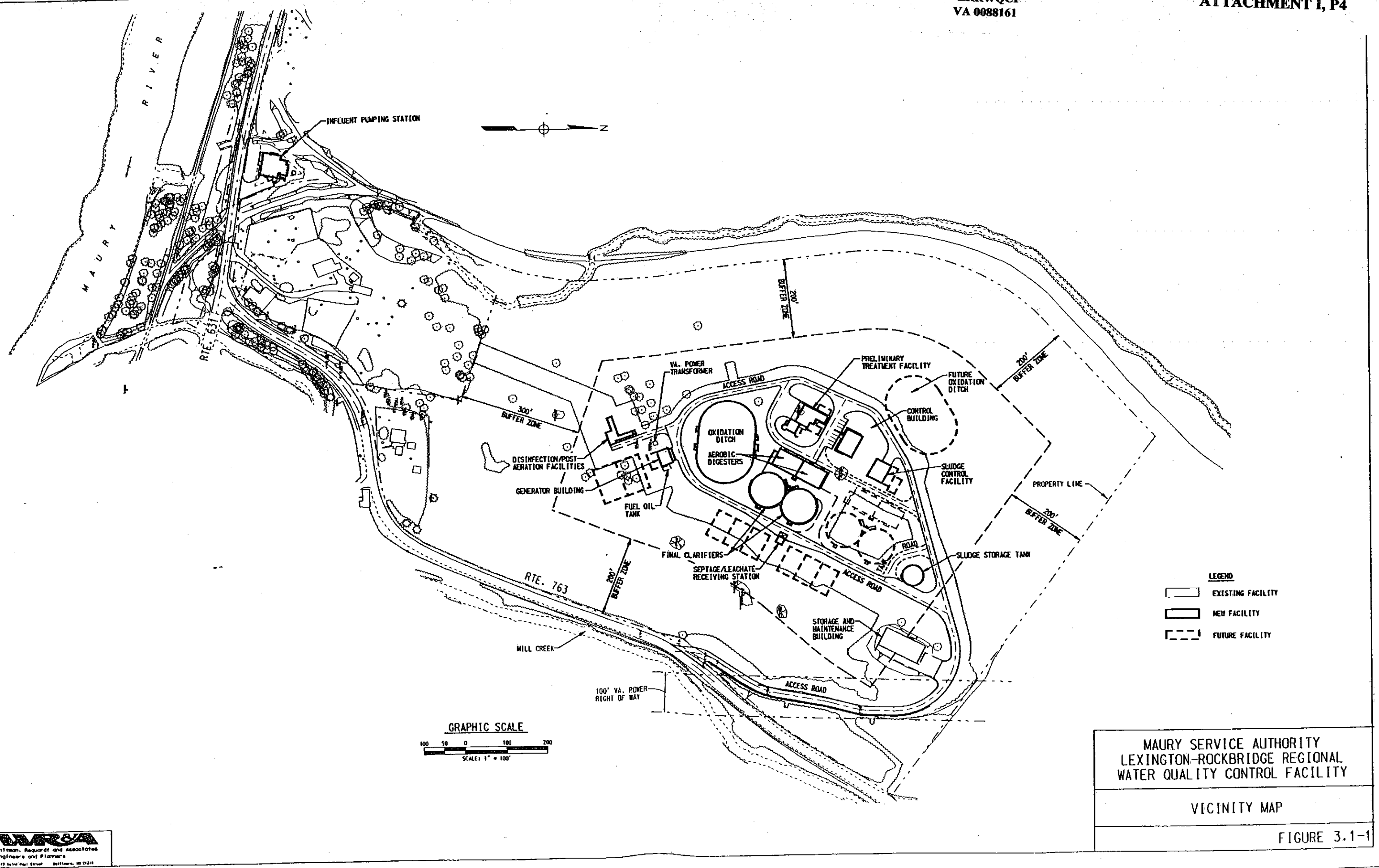


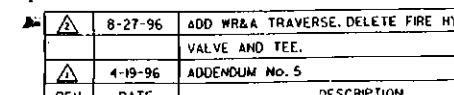
Universal Transverse Mercator (UTM) Projection Zone 17
North American Datum of 1983 (NAD83)

UTM Grid shown in Blue



Magnetic declination at center of map on
August 19, 2009





SLUDGE QUANTITIES (AT 3.1 MGD)

WASTE ACTIVATED SLUDGE
SLUDGE VOLUME AT 1.0% SOLIDS 39,000 GPD
TSS - 3,275 LBS/DAY
VSS - 1,801 LBS/DAY

AEROBIC DIGESTION

DIGESTERS-2 UNITS
VOLUME TOTAL 90,816 FT³
679,350 GALLONS
PEAK MONTH FACTOR 1.2

AEROBIC DIGESTION (CONT.)

DETENTION TIME:
SRT 60 DAYS
HRT 14.5 DAYS

AERATION/MIXING EQUIPMENT

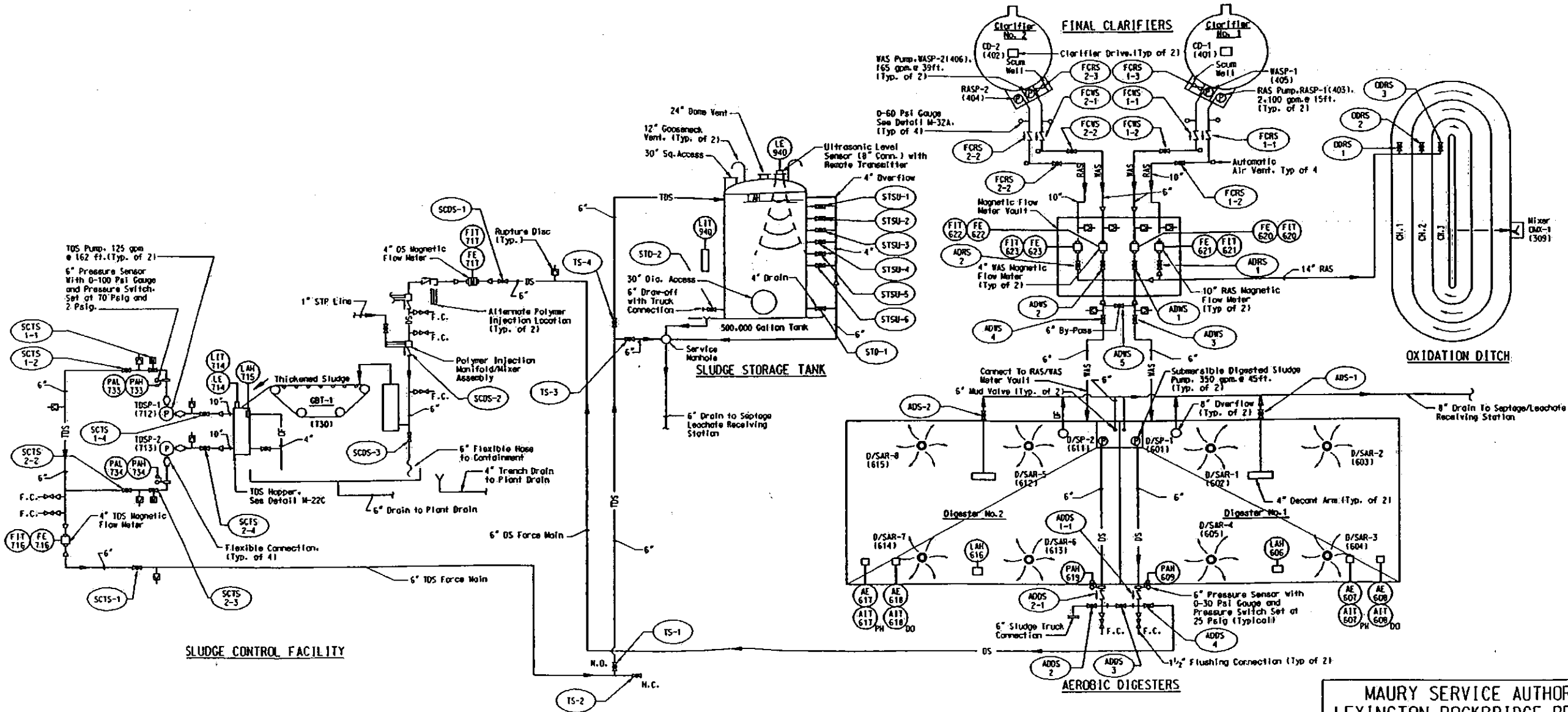
EACH AEROBIC DIGESTER:
SUBMERSIBLE MECHANICAL AERATORS/MIXERS-4 UNITS

WASTE ACTIVATED SLUDGE THICKENING

DIGESTED SLUDGE FLOW AFTER 30% VSS DESTRUCTION
AT 2% SOLIDS 15,000 GPD 2,512 LBS/DAY
GRAVITY BELT THICKENER - 1 UNIT
UNIT WIDTH - 1 METER
SOLIDS LOADING - 3.517 LBS/DAY PER 5 DAY WEEK
HYDRAULIC LOADING (5 DAYS/WEEK) 54 GPM/METER
OPERATING TIME - 32.5 HRS/WEEK

THICKENED SLUDGE STORAGE

CAPACITY 500,000 GALLON
QUANTITY 1



MAURY SERVICE AUTHORITY
LEXINGTON-ROCKBRIDGE REGIONAL
WATER QUALITY CONTROL FACILITY

SOLIDS PROCESS SCHEMATIC

FIGURE 3.1-4

FINAL CLARIFIERS

ULTRAVIOLET DISINFECTION

PRELIMINARY TREATMENT

BIOLOGICAL TREATMENT

OXIDATION DITCH - 1 UNIT
AERATION VOLUME - 2,332,933 GAL
TEMPERATURE - 15°C
SRT - 20 DAYS
HRT - 18 HRS
MLVSS - 2225 MG/L
MLSS - 4000 MG/L
DESIGN CRITERIA INCLUDES PLANT RECYCLES

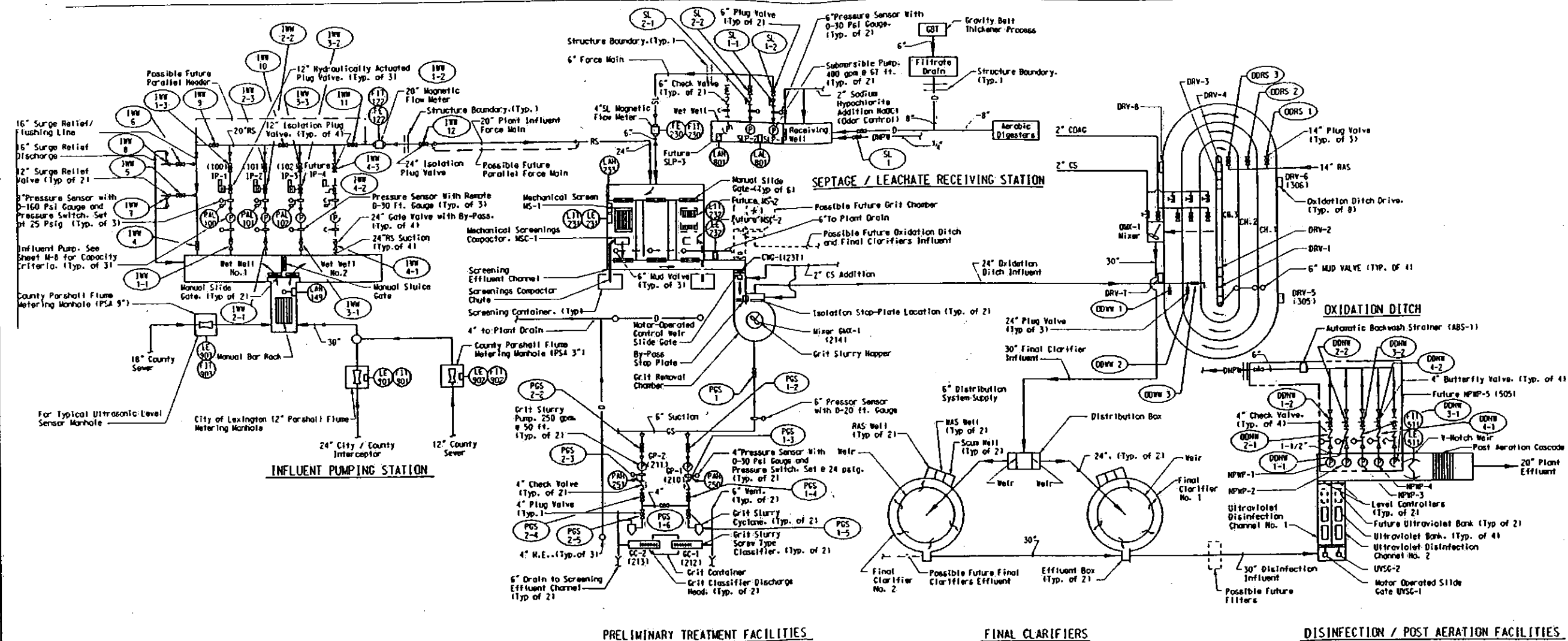
NUMBER OF CHANNELS - 2
AVERAGE DAILY FLOW RATE (PHASE I) - 2 MGD
PEAK FLOW RATE (PHASE I) - 1.5 MGD
AVERAGE DAILY FLOW RATE (PHASE II) - 3 MGD
PEAK FLOW RATE (PHASE II) - 11.2 MGD
ULTRAVIOLET TRANSMITTANCE - 65%
FECAL COLIFORMS PERMITTED 200/100 ML

STEPPED CASCADE

PERMIT REQUIREMENTS

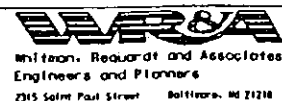
3.0 MGD
30 MG/L
30 MG/L
5.2 MG/L

6.2 MG/L (JUNE THRU NOVEMBER)
14 MG/L (DECEMBER THRU MAY)



To: _____
Date: _____

FIGURE 3.1-3



**VIRGINIA DEQ NO EXPOSURE CERTIFICATION
FOR EXCLUSION FROM VPDES INDUSTRIAL ACTIVITY STORMWATER PERMITTING**

Submission of this **No Exposure Certification** constitutes notice that the entity identified below does not require permit authorization for its stormwater discharges associated with industrial activity under the VPDES Permit Program due to the existence of a condition of **No Exposure**.

A condition of **No Exposure** exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in stormwater discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the No Exposure exclusion. In addition, the exclusion from VPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the No Exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity below is certifying that a condition of No Exposure exists at its facility or site, and is obligated to comply with the terms and conditions at 9VAC25-31-120 E (the VPDES Permit Regulation).

Please Type or Print All Information. ALL INFORMATION ON THIS FORM MUST BE PROVIDED.

1. Facility Operator Information

Name: Maury Service Authority

Mailing Address: PO Box 785

City: Lexington

State: VA

Zip: 24450

Phone: 5404633566

2. Facility/Site Location Information

Facility Name: Lexington-Rockbridge Regional Water Quality Control Facility

Address: 135 Bob Akins Circle

City: Lexington

State: VA

Zip: 24450

County Name: Rockbridge

Latitude: N37 47' 24.0"

Longitude: W79 25' 1.5"

3. Was the facility or site previously covered under a VPDES stormwater permit? Yes ☐ No ☒

If "Yes", enter the VPDES permit number: _____

4. SIC/Activity Codes: Primary: 4952 Secondary (if applicable): _____

5. Total size of facility/site associated with industrial activity: 17 acres

6. Have you paved or roofed over a formerly exposed pervious area in order to qualify for the No Exposure exclusion? Yes ☐ No ☒

If "Yes", please indicate approximately how much area was paved or roofed. Completing this question does not disqualify you for the No Exposure exclusion. However, DEQ may use this information in considering whether stormwater discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.

Less than one acre ☐

One to five acres ☐

More than five acres ☐

7. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) If you answer "Yes" to any of these questions (1) through (11), you are **NOT** eligible for the No Exposure exclusion.

	Yes	No
(1) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to stormwater	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) Materials or residuals on the ground or in stormwater inlets from spill/leaks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(3) Materials or products from past industrial activity	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(4) Material handling equipment (except adequately maintained vehicles)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(5) Materials or products during loading/unloading or transporting activities	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(6) Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to stormwater does not result in the discharge of pollutants)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(7) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(8) Materials or products handled/stored on roads or railways owned or maintained by the discharger	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(9) Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(10) Application or disposal of process wastewater (unless otherwise permitted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(11) Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater outflow	<input type="checkbox"/>	<input checked="" type="checkbox"/>

8. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of no exposure and obtaining an exclusion from VPDES stormwater permitting; and that there are no discharges of stormwater contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under 9VAC25-31-120 E 2).

I understand that I am obligated to submit a No Exposure Certification form once every five years to the Department of Environmental Quality and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Department, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under a VPDES permit prior to any point source discharge of stormwater associated with industrial activity from the facility.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: Richard L. Allen

Print Title: Director, Utilities Processing Department

Email Address: rallen@lexingtonva.gov

Signature: Richard L. Allen

Date: 7-1-14

For Department of Environmental Quality Use Only

Accepted/Not Accepted by: _____ Date: _____

**VPDES/VPA Permit Billing Information Form
for Annual Maintenance Fee**

Facility Name: Lexington-Rockbridge Regional WQCF

Permit Number: VA0088161

Owner Name: Maury Service Authority

Owner Address: PO Box 922

Lexington, VA 24450

Billing Contact Name: Richard L. Allen

Title: Director, Utilities Processing Department, City of Lexington

Phone Number: 540-463-3566

E-Mail Address: rallen@lexingtonva.gov

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in The News Gazette in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed: City of Lexington – Utilities Processing Department

Owner: Maury Service Authority

Agent/Department Address: PO Box 922

Lexington, VA 24450

Agent's Telephone No.: 1-540-463-3566

Printed Name: Richard L. Allen

Authorizing Agent – Signature: Richard L. Allen

Date: 7-1-14

Facility Name: Lexington-Rockbridge Regional WQCF

VPDES Permit No. VA 0088161

VPDES Sewage Sludge Permit Application for Permit Reissuance

Instructions

WHO MUST SUBMIT THE APPLICATION - All facilities with a current VPDES Permit that authorizes the discharge of treated sewage wastewater that are applying for reissuance must complete and submit this application.

Part 1 is general information to be provided by all facilities.

Part 2 must be completed by all facilities that generate Class A or Class B biosolids that are land applied.

Part 3 must be completed by all facilities that land apply Class B biosolids.

Part 1 - Sludge Disposal Management (To be completed by all facilities)

Facility Name: Lexington-Rockbridge Regional WQCF

VPDES Permit No: VA0088161

1. Shipment Off Site for Treatment or Blending

Is sewage sludge from your facility sent to another facility that provides treatment or blending?

☐ Yes ☒ No

If you send sewage sludge to more than one facility, attach additional sheets as necessary.

Shipment off site is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Receiving Facility Name _____

b. Receiving Facility VPDES Permit No. _____

c. Include an acceptance letter from the Receiving Facility.

d. Receiving Facility's ultimate disposal method for sewage sludge _____

To: _____

Date: _____

DEQ VALLEY

JUL 25 2014

2. Disposal in a Municipal Solid Waste Landfill

Is sewage sludge from your facility placed in a municipal solid waste landfill?

☒ Yes ☐ No

If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

Landfilling is: ☐ The primary method of sludge disposal ☒ A back up method of sludge disposal

a. Landfill Name _____

Rockbridge County Landfill

b. Landfill Permit No. _____

075

c. Include an acceptance letter from the landfill. Attached

3. Incineration

Is sewage sludge from your facility fired in a sewage sludge incinerator?

☐ Yes ☒ No

Incineration is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?

☐ Yes ☐ No

If yes, provide the Air Registration No. _____

If no, complete items b - d for each incinerator that you do not own or operate.

b. Facility Name _____

c. Air Registration No. _____

d. Include an acceptance letter from the Incinerator.

4. Class A Biosolids

Do you produce Class A biosolids for land application or distribution and marketing? If yes, complete Part 2.

☐ Yes ☒ No

Are Class A biosolids from your facility land applied in bulk?

☐ Yes ☒ No

Do you sell or give away Class A biosolids in a bag or other container for application to the land? If yes, provide the

☐ Yes ☒ No

VDACS certification number? _____

5. Class B Biosolids

Do you produce Class B biosolids? If yes, complete Part 2.

☒ Yes ☐ No

Are Class B biosolids from your facility land applied under the authorization of this VPDES Permit? If yes, complete Part 3.

☒ Yes ☐ No

6. Land Application Under a Separate Permit

Are biosolids from your facility land applied under the authorization of a permit other than your VPDES Permit?

☐ Yes ☐ No

Biosolids are land applied under the authorization of a ☒ VPA permit ☐ Another VPDES Permit ☐ Out of State

Complete items a - c for each VPA permit authorized to land apply biosolids from your facility.

a. Permittee Name _____

b. Permit No. _____

Houff's Feed & Fertilizer

VPA 01581, VPA 01566, VPA 01580

c. Include copy of any information you provide to the Receiving VPDES or VPA Permittee to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.F. Attached

VPDES Sewage Sludge Permit Application for Permit Reissuance

Part 2 - Biosolids Characterization (To be completed by all facilities that generate biosolids that are land applied.)

1. Have there been changes to sludge treatment processes or storage facilities since the previous permit issuance/reissuance? ☒ Yes ☐ No
2. Do the biosolids generated under this permit that will be land applied meet one of the Class A pathogen requirements in 9 VAC25-31-710.A.3. through A.8 or Class B pathogen requirements in 9VAC25-31-710.B.1. through B.4.? ☒ Yes ☐ No

Identify the pathogen reduction option utilized to demonstrate compliance with the pathogen reductions requirements and provide the data that demonstrate compliance with the applicable alternative. Class B Alternative 1

3. Do the biosolids generated under this permit that will be land applied meet one of the vector attraction reduction requirements in 9VAC25-31-720.B.1. through 10? ☒ Yes ☐ No

Identify the vector attraction reduction option utilized to demonstrate compliance with the vector attraction reductions requirements and provide the data that demonstrate compliance with the applicable alternative. Alternative 4 (SOUR)

4. Do the biosolids to be land applied meet the ceiling/pollutant concentrations in 9VAC25-31-540.B? ☒ Yes ☐ No
5. Has data from the most recent 3 samples for pH (S. U.), Percent Solids (%), Ammonium Nitrogen (mg/kg), Nitrate Nitrogen (mg/kg), Total Kjeldahl Nitrogen (mg/kg), Total Phosphorus (mg/kg), Total Potassium (mg/kg), Alkalinity as CaCO₃ (mg/kg), Arsenic (mg/kg), Cadmium (mg/kg), Copper (mg/kg), Lead (mg/kg), Mercury (mg/kg), Nickel (mg/kg), Selenium (mg/kg), Zinc (mg/kg) been submitted to DEQ? The samples shall be no more than 4½ years old and each sampling date shall be at least 1 month apart. ☒ Yes ☐ No

If no, provide the data with this application.

Part 3 - Land Application of Class B Biosolids (To be completed by all facilities that land apply Class B biosolids.)

1. Provide to DEQ and to each locality in which biosolids are to be land applied, written evidence of financial responsibility. Evidence of financial responsibility shall be provided in accordance with 9VAC25-31-100.P.9. To be submitted
2. For each site, provide a properly completed landowner agreement for each landowner, using the most current Land Application Agreement - Biosolids Form (VPDES Sewage Sludge Permit Application Form - Attachment to Section C).
3. Are any new land application fields proposed at this reissuance? ☒ Yes ☐ No

If yes, contact the DEQ Regional Office for additional submittal requirements.

4. For the currently permitted land application fields, are the previously submitted site booklets, maps and acreage accurate. ☒ Yes ☐ No

If no, contact the DEQ Regional Office for additional submittal requirements. Previously submitted copies to be updated

5. Does the facility's Biosolids Management Plan on file with DEQ include the following minimum information? ☒ Yes ☐ No
 - a. An odor control plan that addresses the abatement of odors resulting from the storage and/or land application of biosolids.
 - b. A description of the transport vehicles to be used.
 - c. Procedures for biosolids offloading at the land application site including spill prevention, cleanup (including vehicle cleaning), field reclamation, and emergency notification and cleanup measures.
 - d. A description of the land application equipment including procedures for calibrating equipment to ensure uniform distribution and appropriate loading rates.
 - e. Procedures used to ensure that land application activities address notification requirements, signage requirements, slope restrictions, operation limitations during periods of inclement weather, soil pH requirements, buffer zone requirements, and site restrictions.
 - f. Any other information necessary to ensure compliance with the requirements of the Biosolids Program of the VPDES Permit Regulation (9VAC25-31-420 through 720).

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title Richard L. Allen, Director, Utilities Processing Department, City of Lexington

Signature Richard L. Allen

Telephone number / Email (540) 463-3566

rallen@lexingtonva.gov

Date signed 7-22-14

(Based on a review of this information, it may be necessary to submit additional information to meet other legal or technical review requirements.)

DEQ VALLEY

JUL 25 2014

To: _____

Date: _____

VIRGINIA POLLUTION ABATEMENT APPLICATION

FORM D

MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-II LAND APPLICATION OF BIOSOLIDS ~~Lexington-Rockbridge WQCF – VA0088161~~

All of the information provided in this application will become part of the Biosolids Management Plan associated with a VPA individual permit issued for the proposed activity.

General Information

1. Owner Legal name. (Should be the same name given on Form A, Item 2).

~~Maury Service Authority – operated by Lexington-Rockbridge Regional WQCF – VA0088161~~

2. Provide a general description of the proposed operation. Previously submitted
- a. Provide a list of the generators of biosolids that you currently handle, and each source of biosolids produced at the generating facility proposed for land application. This list shall include only sources that are identified as approved on the DEQ Sources list. (A source of biosolids at the generating facility is the product of a specific series of treatment unit processes, and a single facility may have multiple sources. For example, a generator that splits its waste activated sludge, half to a digester and a belt press and the other half to lime stabilization has 2 sources of biosolids) Include the following information:
- 1) Legal name as it is identified on the DEQ Sources List and VPDES, NPDES or other state permit number of the generating facility;
 - 2) Source of biosolids as identified by "Treatment Type" on the DEQ Sources List;
 - 3) Provide the generating facility's odor control plan for sources identified as approved on the DEQ Sources List, but for which an odor control plan has not been submitted. The odor control plan shall contain at minimum:
 - a) Methods used to minimize odor in producing biosolids;
 - b) Methods used to identify malodorous biosolids before delivery to the land applicator (at the generating facility);
 - c) Methods used to identify and abate malodorous biosolids if delivered to the field, prior to land application; and
 - d) Methods used to abate malodor from biosolids if land applied;
 - b. General location of sites proposed for application, and
 - c. Methods of biosolids application proposed.
3. Provide a legible copy of any leasing agreements necessary for the operation of any treatment or storage facilities not under direct ownership of the applicant, which identifies the involved parties. NA
4. Identify the methods for notification of DEQ and local government prior to proposed land application activities. Written notification via email or fax
5. Provide to the DEQ and to each locality in which the biosolids are to be applied, written evidence of financial responsibility. Evidence of financial responsibility shall be provided in accordance with the requirements specified under 9VAC25-32-770 et seq.

To be submitted

Design Information

Biosolids Characterization (Previously submitted)

6. Provide a separate biosolids characterization form, Part D-IV, for each source of biosolids that is not identified as approved on the VA DEQ Approved Biosolids Source List. If a source is identified as pending, contact DEQ Office of Land Application to determine what additional information is required. The following biosolids sources will always require a characterization form:
- a) biosolids from a new generating facility,
 - b) biosolids from an existing generator that has never been land applied in Virginia,
 - c) biosolids from an existing generator that has not been land applied in Virginia within the past 5 years and has not submitted biosolids monitoring data in the last 5 years,
 - d) biosolids produced by a new treatment process within an existing facility.
7. Provide a Non-Hazardous Declaration Statement for each biosolids, Part D-V.
Previously submitted

Biosolids Storage NA

8. Describe the current status of the available biosolids storage. List in a tabular format the **routine** biosolids storage facilities and **on-site** storage by location, total storage capacity, and the biosolids contracts currently permitted or assigned to these facilities or sites.
9. Provide plans and specifications for **routine** and **on-site** storage of all biosolids to be handled that depict the following information:
- a. Site layout on a recent 7.5 minute topographic quadrangle or other appropriate scaled map with the following information:
 - (1) Location of any required soil, geologic and hydrologic test holes or borings
 - (2) Location of the following field features within 0.25 miles of the site boundary (indicated on the map) with the approximate distances from the site boundary.
 - (a) Water wells (operating or abandoned).
 - (b) Surface waters.
 - (c) Springs.
 - (d) Public water supplies.
 - (e) Sinkholes.
 - (f) Underground and/or surface mines.
 - (g) Mine pool (or other) surface water discharge points.
 - (h) Mining spoil piles and mine dumps.
 - (i) Quarries.
 - (j) Sand and gravel pits.
 - (k) Gas and oil wells.
 - (l) Diversion ditches.
 - (m) Occupied dwellings, including industrial and commercial establishments.
 - (n) Landfills - dumps.
 - (o) Other unlined impoundments.
 - (p) Septic tanks and drainfields.

- (q) Injection wells.
- b. Topographic map (10-foot contour preferred) of sufficient detail to clearly show the following information:
 - (1) Maximum and minimum percent slopes.
 - (2) Depressions on the site that may collect water.
 - (3) Drainage ways that may attribute to rainfall run-on to or runoff from this site.
 - (4) Portions of the site (if any) which are located within the 100-year floodplain.
 - c. Data and specifications for the liner proposed for seepage control.
 - d. Scaled plan view and cross-sectional view of the storage facilities or sites showing inside and outside slopes of all embankments and details of all appurtenances.
 - e. Calculations justifying impoundment capacity, including freeboard where applicable.
 - f. A description of supernatant handling and disposal.
 - g. Groundwater monitoring plans for the facilities or sites including pertinent hydrogeological data to justify upgradient and downgradient well location and depth.
10. For the routine storage of biosolids, provide evidence of certification by the local government of the locality in which the biosolids are to be stored that the storage site is consistent with all applicable ordinances. Evidence of certification shall consist of the following:
- a. A copy of the certification from the local government confirming that the storage site is consistent with all applicable ordinances, or where the local government fails to respond within 30 days of receiving the request for certification, a copy of the letter from the applicant to the local government requesting certification of the storage facility; or
 - b. A copy of the special exception or special use permit from the local government that has adopted an ordinance in accordance with § 62.1-44.19:3.R of the Code of Virginia.

Biosolids Transport

11. Provide a detailed description for each of the following:
- a. Vehicles that will be used to transport biosolids from generators or storage to land application sites; NA
 - b. Routes to be used to transport biosolids from the generator(s) to storage unit(s); NA
 - c. Procedures for biosolids off-loading at the biosolids facilities and the land application site together with spill prevention, cleanup (including vehicle cleaning) and emergency spill notification and cleanup measures; and
Spill response and recovery procedure attached; off-loading procedures previously submitted.
 - d. Voucher system to be used to document transport and delivery of biosolids from their source to the land application site or a facility to further process the biosolids for marketing. Also describe record retention for vouchers.

Daily Log Sheet filled out by driver of sludge trucks showing time each load is land applied to the field by each truck. Log attached

Field Operations

12. For field operations involving storage, provide a detailed description for each of the following:
NA

- a. Routine storage—procedures for biosolids loading of transport vehicles, equipment cleaning, freeboard maintenance for storage of liquid biosolids, and inspections for structural integrity of the storage unit;
- b. On-site storage—procedures for DEQ approval and implementation; designated site locations if provided in the "Design Information"; the specific site criteria including the best management practices that will be utilized to prevent contact with storm water run on or runoff and the procedures to be followed to ensure the 45 day time limit will be met;
- c. Staging - procedures for DEQ notification; procedures to be followed including either designated site locations provided in the "Design Information" or the specific site criteria for such locations including the liner or cover requirements and the time limit assigned for such use;
- d. Procedures for reestablishment of off-loading and staging areas.

13. Provide a detailed description for each of the following:

- a. The biosolids spreader vehicles and the specifications of each vehicle.

Transport vehicles for liquid biosolids shall include closed water-tight tank trucks designed to prevent leakage and spillage. Tanker trucks should be equipped with water tanks and hoses for cleaning, safety caps to prevent spillage during transport, and discharge hoses (such as splash plate nozzles) to provide for uniform distribution on the field. Trucks should be equipped with tires to provide maximum traction on the field. Current equipment (2014) includes two tanker trucks (2300 gallons and 2800 gallons) and flotation tires.

- b. Procedures for calibrating each spreader based on the solids content of various biosolids to ensure uniform distribution and appropriate loading rates on a day-to-day basis.

Trucks shall be calibrated annually by Department of Conservation Resources (DCR) to ensure that the spread pattern is consistent and there is no pooling of biosolids. The calibrations are done during the land application process. Measurements of the pattern length and width while emptying the truck are used to calculate the gallons/acre.

- c. Procedures used to ensure that operations address the following constraints:

- (1) Application of biosolids to frozen ground, pasture or hay fields, crops for direct human consumption and saturated or ice/snow covered ground; and

Use of landowner agreement for farmer; fields checked by certified land appliers for appropriate conditions concerning ice, snow.

- (2) Establishment of setback distances, slopes, prohibited access for beef and dairy animals, soil pH requirements, and proper site specific biosolids loading rates on a field-by-field basis.

Soil sampling and analyses and biosolids analyses for Nutrient Management Plans to establish loading rates for specific fields. Certified land appliers check fields for rocks, slopes, and buffers before applying. Clinometer used for measuring slope and range finder for measuring distance. Field features identified on site maps carried in truck by drivers, along with field management practices.

14. Provide a Land Applier Odor Control Plan that includes at a minimum: Previously submitted

- a. Methods used to identify and abate malodorous biosolids in the field prior to land application, and
- b. Methods used to abate malodorous biosolids if land applied.

Land Application Sites

15. Provide the DEQ control number, if previously assigned, identifying each land application field. If a DEQ control number has not been assigned, provide the site identification code used by the permit applicant to report activities and the site's location.
Provided in Field Summary Sheet Workbook
16. Provide the latitude and longitude of each land application site in decimal degrees to three decimal places and the method of determination.
Provided in Field Summary Sheet Workbook
17. Provide a properly completed Biosolids Application Agreement for each land owner, Part D-VI.
Submitted
18. Provide a legible topographic map and aerial photograph, including legend, of proposed application areas to scale as needed to depict the following features:
Previously submitted - maps being updated for buffers in new regulations.
 - a. Property boundaries;
 - b. Surface water courses, including drainage ways;
 - c. Water supply wells and springs;
 - d. Roadways;
 - e. Rock outcrops;
 - f. Slopes;
 - g. Sinkholes
 - h. Frequently flooded areas (National Resources Conservation Service (NRCS) designation);
 - i. Occupied dwellings within 400 feet of the property boundaries and all existing dwelling and property line setback distances;
 - j. Publicly accessible properties and occupied buildings within 400 feet of the property boundaries and the associated extended setback distances; and
 - k. The gross acreage of the fields where biosolids will be applied;
19. Provide a county map or other map of sufficient detail to show general location of the site and proposed transport vehicle haul routes to be utilized from the treatment plant or storage facility. Route maps for each farm previously submitted
20. Provide county tax maps labeled with Tax Parcel ID(s)] for each farm to be included in the permit, which may include multiple fields to depict properties within 400 feet of the field boundaries. Submitted with Landowner Agreement
21. Provide a USDA soil survey map, if available, of proposed sites for land application of biosolids. Previously submitted
22. Provide the name, mailing address, and telephone number of each site owner, if different from the applicant. Provided on Landowner Agreement
23. Provide the name, mailing address, and telephone number of the person who applies biosolids to the site, if different from the applicant. NA
24. Provide information as to whether the site is agricultural land, forest, a public contact site, or a reclamation site, as such site types are defined in 9VAC25-32-10. Agricultural
25. Provide a description of agricultural practices including a list of proposed crops to be grown.
Provided in Nutrient Management Plan
26. Provide the following information for each land application site that has been identified at the time of permit application, if the applicant intends to apply bulk biosolids subject to the

cumulative pollutant loading rates in 9VAC25-32-356 Table 3 to the site: **NA**

- (a) Whether the applicant has contacted VA DEQ to ascertain whether bulk biosolids subject to 9VAC25-32-356 Table 3 has been applied to the site on or since July 20, 1993, and if so, the name of person contacted; and
 - (b) Identification of facilities other than the applicant's facility that have sent, or are sending, biosolids subject to the cumulative pollutant loading rates in 9VAC25-32-356 Table 3 to the site since July 20, 1993, if, based on the inquiry in item (a) above, bulk biosolids subject to cumulative pollutant loading rates in 9VAC25-32-356 Table 3 has been applied to the site since July 20, 1993.
27. Provide a nutrient management plan approved by the Department of Conservation and Recreation and a copy of the DCR approval letter for application sites meeting the following conditions: **NA**
- (a) Sites operated by an owner or lessee of a confined animal feeding operation, as defined in subsection A of § 62.1-44.17:1 of the Code of Virginia, or confined poultry feeding operation, as defined in subsection A of § 62.1-44.17:1.1 of the Code of Virginia;
 - (b) Sites where land application more frequently than once every three years at greater than 50% of the annual agronomic rate is proposed;
 - (c) Mined or disturbed land sites where land application is proposed at greater than agronomic rates; or
 - (d) Other sites based on site-specific conditions that increase the risk that land application may adversely impact state waters.
28. For mined or disturbed sites where land application is proposed at greater than agronomic rates, provide a reclamation plan that establishes the biosolids application rates and other site specific management practices. **NA**

Spill Response and Recovery

- (1) Responsibility of operator to take any feasible action to stop and contain spill.
- (2) Report to Plant Superintendent (540-817-0224) or other plant personnel (540-463-5936, 540-463-3566) to request any needed assistance.
- (3) Put out flares or reflector triangles for traffic control during cleanup. Notify county sheriff's office (540- 463-7328) if assistance is needed for traffic control.
- (4) Recovery of spill may include addition of absorbent material (such as lime or sawdust) and removal by shovel to prevent spill from entering pathways to surface water.
- (5) Required notifications within 24 hours specified in form below.

Spill description: Date _____ Time _____ Driver _____

Location and area of spill: _____

Nature of spill: Estimated quantity in gallons _____ Area in sq.ft. _____

Describe spill recovery: _____

Corrective action to prevent future spills: _____

Notifications:

24 hour verbal to to DEQ (540- 574-7800) and the Rockbridge County Administrator (540-463-4361). It is the responsibility of the driver to report the spill to the Plant Superintendent immediately. A verbal report shall be made to DEQ and county as soon as possible, but no later than 24 hours. In the absence of the Plant Superintendent, the driver shall make the verbal reports . Notification after business hours may be provided by email, fax, or voice mail.

5-day letter (first class mail, email, fax) to DEQ and County Administrator including above information. Responsibility of Plant Superintendent or other designated personnel.

Odor Control Plan - Generator

Facility Name: Lexington-Rockbridge Regional WQCF

Address: 135 Bob Akins Circle

City State: Lexington, VA 24450

VPDES/NPDES Permit Number:

VA0088161

Contact Name: Fred Schultz

Phone Number: 5404635936

Email address: fschultz@lexingto.va.gov

"Malodor" means an unusually strong or offensive odor associated with biosolids or sewage sludge as distinguished from odors commonly associated with biosolids or sewage sludge.

Answer all 4 questions and check all methods that apply OR add alternative methods.

1) Identify methods used to minimize odor during production of biosolids:

Vector Attraction Reduction Method:

- ☐ 38% VSS solids reduction – Treatment minimizes odors through anaerobic digestion to produce Class B biosolids. Digestion detention times and digester temperatures along with volatile solids reduction are monitored to ensure that State and Federal standards are achieved.
- ☐ Lime Addition: Treatment includes adding sufficient lime to the biosolids to raise the pH to > 12 after two hours and then testing again after an additional 22 hours for a pH greater than 11.5. Lime feed rates and biosolids pH data will be recorded and checked.

Additional procedures (if applicable):

- ☐ 15 day minimum detention time and a minimum of 95 degrees F in anaerobic digestion will be maintained
- ☒ SOUR testing of biosolids
- ☒ Fecal coliform testing of biosolids
- ☒ Avoid septic conditions during sludge production
- ☒ Maintain alkalinity during aerobic digestion
- ☒ Monitor all sludge produced for SOUR < 1.5 mg/L and Fecal Coliform to satisfy class B pathogens. Solids not released to Sludge Storage Tank until stabilization and pathogen reduction for Class B biosolids met.

- ☒ Addition of Ferric Chloride during secondary treatment and to Sludge Storage Tank during long storage periods
- ☒ Digester detention time can be increased by feeding waste activated sludge through the Gravity Belt Thickener prior to digestion
- ☒ The Sludge Storage Tank is equipped with mixers which help prevent septic conditions in the tank
- ☒ Efforts are made to minimize holding time in the Sludge Storage Tank

2) Identify methods used to identify malodorous biosolids at the generating facility:

- ☒ Wastewater treatment facility staff will periodically perform visual as well as odor observations of the biosolids being digested to ensure that nothing out of the ordinary is occurring during processing operations. If the solids appear to have unusual odors, these solids will be further treated and will not be thickened to the Sludge Storage Tank until the odor has improved.
- ☒ Dissolved oxygen, pH, alkalinity, volatile solids, and SOUR testing during digestion
- ☒ Wastewater treatment facility staff will periodically observe loading operations to check odor conditions of biosolids

3) Identify methods used to identify and abate malodor after delivery to a land application site (before land application):

- ☐ The land application contractor's personnel will perform a visual as well as odor observation biosolids delivered to the land application sites. They will determine if any of the individual loads arriving on-site appear to be more odorous and darker in color than usual. If malodor of the biosolids is present, the contractor will confer with wastewater treatment plant staff and can remove the biosolids and return those loads to the wastewater treatment plant for further treatment or transport to a landfill
- ☒ Confer with land applicator and utilize a remote land application site
- ☐ Check pH levels on suspect lime stabilized biosolids
- ☒ Contract land applicator (emergency disposal) will use methods identified in land applicator's odor control plan

4) Identify methods used to abate malodor after land application:

- ☒ Incorporate biosolids into the soil
- ☐ Use a deodorizer
- ☒ Addition of lime
- ☒ Contract land applicator will use methods identified in land applicator's odor control plan

Odor Control Plan – Land Applier

Facility Name: Lexington-Rockbridge Regional WQCF
Address: 135 Bob Akins Circle
City State: Lexington, VA

VPDES/NPDES Permit Number:
VA 0088161

Contact Name: Fred Schultz
Phone Number: 5404635936
Email address: fschultz@lexingto.va.gov

"Malodor" means an unusually strong or offensive odor associated with biosolids or sewage sludge as distinguished from odors commonly associated with biosolids or sewage sludge.

1) Identify methods to identify malodor after delivery to a land application site (check all that apply):

- ☒ Comparison of odors from each truck load to identify loads with unusually strong or offensive odor
- ☐ pH analysis
- ☐ Odor measurement device (e.g. Nasal Ranger)
- ☒ Other: Since LRRWQCF is generator, it is believed that unusually offensive odor would be detected before transport, while loading truck.

2) Identify methods to abate malodor after delivery to a land application site (check all that apply):

- ☐ Removal to a landfill
- ☒ Transport to a more secluded site
- ☐ Odor measurement device (e.g. Nasal Ranger)
- ☒ Other: Return to plant for discharge to head of plant for further processing

3) Identify methods to abate malodor after biosolids are land applied:

- ☒ Incorporation
- ☒ Other: application of lime

4) Identify procedures for reporting odor complaints or determination of malodor to the generator:
(Refer to contacts on Generator OCP, any agreements you have with generators regarding handling of odor complaints, etc.)

LRRWQCF is both generator and land applier.

- X** Contact information for reporting odor or any other complaint is provided on signs posted at the land application, including the phone numbers for the wastewater treatment plant and the Departmental of Environmental Quality.
- X** Truck drivers document all complaints on daily logs and pass information onto plant personnel.
- X** All complaints are promptly investigated and documented on the monthly biosolids activity reports.
- X** Any unresolved complaints are referred to DEQ.
- X** It is realized that odor is a critical issue in the public perception and acceptance of biosolids. The following strategies are used to minimize the impact of nuisance odors from the land application of biosolids and to improve public relations with adjacent landowners.
 - Land application may be limited during times when outdoor activities are planned upon request from adjacent landowners
 - Factors such as wind, humidity, and time of day are considered when applying biosolids with more offensive odors.
 - When possible, biosolids that have been stored during the winter are applied on more remote sites.

Month	Year	Truck #	Gallons
-------	------	---------	---------

Record any complaints, unusual events, inspections on date occurring. Use P2 if more space needed.

Site # _____	Gallons Remaining _____	Date _____
Site # _____	Gallons Remaining _____	Date _____
Site # _____	Gallons Remaining _____	Date _____

I confirm that I was onsite at the reported times of operations for which I was the Certified Land Applicator in charge. All land application activities were in compliance with Permit VA0088161 with the following exceptions:

Date _____

Ily Digested Biosolid:

[illegible]

d Land Applicator in charge.
ng exceptions:

Site List - Acres
October 2009

Number	Gross Acres	Net Acres	DSM	Owner/Contact
91	5.2	5	1017	Hartwell/Clark
	7.6	7.5	1017	Hartwell/Clark
104	13	11	1019	Baisley
105	13	11	1019	Baisley
121	18	15	1024	Hostetter
123	7	5	1024	Hostetter
124	8	5	1024	Hostetter
149	4.5	3.9	1031	Beverly
150	6.5	6.2	1031	Beverly
151	6	5	1031	Beverly
152	14.5	14	1031	Beverly
153	15	12	1031	Beverly
165	6.5	6.5	1035	Cranston/Sorrells
166	3.4	2.5	1035	Cranston/Sorrells
171	50	38.5	1037	Showalter
172	16	16	1037	Showalter
173	10	8	1037	Showalter
175	5.5	5.1	1039	Bryant
176	8	4.7	1039	Bryant
177	8.8	7.7	1040	Flint

deleted



www.co.rockbridge.va.us

JEREMY S. GARRETT
Director of Solid Waste &
Transportation
Office: (540) 463-1462
Fax: (540) 463-5981

jeremy_garrett@co.rockbridge.va.us

County of Rockbridge

Solid Waste & Transportation

150 South Main Street
Lexington, Virginia 24450

Rockbridge County
Board Members

JOHN M. HIGGINS

RUSSELL S. FORD

DAVID W. HINTY, JR.

RONNIE R. CAMPBELL

ALBERT W. LEWIS, JR.

June 23, 2014

Lexington-Rockbridge Regional WQCF, VA 0088161
Attn: Joan Biggs
135 Bob Akins Circle
Lexington, VA 24450

Ms. Biggs:

In response to the June 4th request received from the Lexington-Rockbridge Regional WQCF, the Rockbridge County Landfill, Permit No.075 would be able to accept sludge from the Lexington-Rockbridge Regional Water Quality Control Facility (LRRWQCF) on an emergency basis. All future sludge must meet the paint filter test (no free liquids) and any other Federal, State, or Local solid waste requirements at the time of disposal. The tonnage accepted would be based on the specific ratio of waste to sludge allowed by Virginia Department of Environmental Quality at the time of disposal.

Sincerely,

Jeremy S. Garrett
Director of Solid Waste and Transportation

DEQ VALLEY

JUL 25 2014

To: _____

Date: _____

cc: Spencer Suter, County Administrator
Lynn Klappich, Draper Aden Associates
Jerry Higgins, Executive Director – Maury Service Authority



July 11, 2014

Mr. Tim Grove
Houff's Feed & Fertilizer
97 Railside Drive
Weyers Cave, VA 24486

Re: NANI – Lexington Rockbridge Regional WQCF - Land Application of Biosolids

Tim,

Since our biosolids may be land applied under your VPA Permits, I have attached the results from our most recent sludge analyses. These analyses were conducted during May and June 2014.

In the event that we would use your services, we would provide you with the most current information at that time. Please let us know if you need additional information.

Yours truly,

Joan H. Biggs
Lab Specialist

Notice and Necessary Information

Lexington-Rockbridge Regional Water Quality Control Facility

Pollutant Concentrations

Constituent	LRRWQCF Concentration Dry Weight (mg/kg) 5/6/2013	Pollutant Concentrations (Table 3. 40 CFR 503.13) Monthly Average (mg/kg)	Ceiling Concentrations * (Table 1. 40 CFR 503.13) Daily Maximum (mg/kg)
Arsenic	3.0	41	75
Cadmium	2.0	39	85
Copper	353	1500	4300
Lead	23	300	840
Mercury	<.4	17	57
Molybdenum	5	NA	75
Nickel	30	420	420
Selenium	<5.0	100	100
Zinc	640	2800	7500
TKN	17700	NA	NA
Ammonium Nitrogen	11800	NA	NA
Nitrate Nitrogen	28.4	NA	NA
Total Phosphorus	35700	NA	NA
Total Potassium	4900	NA	NA

* Biosolids may not be applied if pollutant exceeds these values

Pathogen Reduction Requirements 9 VAC 25-31-710.B: Class B Biosolids <1000cfu/g ts
(5/20-6/16/2014)

Vector Attraction Reduction Requirements 9 VAC 25-31-720.B: Option 4 1.3 mgO₂/hr/g ts
(5/6, 5/7/2014)

PCBs (SW8082): ND (<2.05 mg/Kg) 6/2/2014

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

7-9-14

Date Signed

Richard L. Allen

Richard L. Allen, Director
Utilities Processing Department
City of Lexington
Phone: 1-540-463-3566

JUL 25 2014

To: _____

Date: _____



Improving the environment, one client at a time...

REI Consultants, Inc.
PO Box 286
Beaver, WV 25813
TEL: 304.255.2500
Website: www.reiclabs.com

3029-C Peters Creek Road
Roanoke, VA 24019
TEL: 540.777.1276

101 17th Street
Ashland, KY 41101
TEL: 606.393.5027

1557 Commerce Road, Suite 201
Verona, VA 24482
TEL: 540.248.0183

16 Commerce Drive
Westover, WV 26501
TEL: 304.241.5861

Thursday, June 05, 2014

Ms. Joan Biggs
LEXINGTON-ROCKBRIDGE RWQCF
135 BOB ATKINS CIRCLE
LEXINGTON, VA 24450

TEL: (540) 463-5936

FAX: (540) 463-6707

RE: MUNICIPAL SLUDGE

Work Order #: 1406115

Dear Ms. Joan Biggs:

REI Consultants, Inc. received 1 sample(s) on 6/2/2014 for the analyses presented in the following report.

Sincerely,

Kathy Berry



Client: LEXINGTON-ROCKBRIDGE RWQCF**Project: MUNICIPAL SLUDGE**

The analytical results presented in this report were produced using documented laboratory SOPs that incorporate appropriate quality control procedures as described in the applicable methods. Verification of required sample preservation (as required) is recorded on associated laboratory logs. Any deviation from compliance or method modification is identified within the body of this report by a qualifier footnote which is defined at the bottom of this page.

All sample results for solid samples are reported on an "as-received" wet weight basis unless otherwise noted.

Results reported for sums of individual parameters, such as TTHM and HAA5, may vary slightly from the sum of the individual parameter results, due to rounding of individual results, as required by EPA.

The test results in this report meet all NELAP (and/or VELAP) requirements for parameters except as noted in this report.

Please note if the sample collection time is not provided on the Chain of Custody, the default recording will be 0:00:00. This may cause some tests to be apparently analyzed out of hold.

All tests performed by REIC Service Centers are designated by an annotation on the test code. All other tests were performed by REIC's Main Laboratory in Beaver, WV.

This report may not be reproduced, except in full, without the written approval of REIC.

DEFINITIONS:

MCL: Maximum Contaminant Level

MDL: Method Detection Limit; The lowest concentration of analyte that can be detected by the method in the applicable matrix.

Mg/Kg or mg/L: Units of part per million (PPM) - milligram per Kilogram (weight/weight) or milligram per Liter (weight/volume).

NA: Not Applicable

ND: Not Detected at the PQL or MDL

PQL: Practical Quantitation Limit; The lowest verified limit to which data is quantified without qualifications. Analyte concentrations below PQL are reported either as ND or as a number with a "J" qualifier.

Qual: Qualifier that applies to the analyte reported.

TIC: Tentatively Identified Compound, Estimated Concentration denoted by "J" qualifier.

Ug/Kg or ug/L: Units of part per billion (PPB) - microgram per kilogram (weight/weight) or microgram per liter (weight/volume).

QUALIFIERS:

X: Reported value exceeds required MCL

B: Analyte detected in the associated Method Blank at a concentration > 1/2 the PQL

E: Analyte concentration reported that exceeds the upper calibration standard. Greater uncertainty is associated with this result and data should be considered estimated.

H: Holding time for preparation or analysis has been exceeded.

J: Analyte concentration is reported, and is less than the PQL and greater than or equal to the MDL. The result reported is an estimate.

S: % REC (% recovery) exceeds control limits

CERTIFICATIONS:

Beaver, WV: WVDHHR 00412CM, WVDEP 060, VADCLS 00281, KYDEP 90039, TNDEQ TN02926, NCDWQ 466, PADEP 68-00839, VADCLS (VELAP) 460148

Bioassay (Beaver, WV): WVDEP 060, VADCLS(VELAP) 460148, PADEP 68-00839

Roanoke, VA: VADCLS(VELAP) 460150

Verona, VA: VADCLS(VELAP) 460151

Ashland, KY: KYDEP 00094, WVDEP 389

Morgantown, WV: WVDHHR 003112M, WVDEP 387

WO#: 1406115

Date Reported: 6/5/2014

Client: LEXINGTON-ROCKBRIDGE RWQCF
Project: MUNICIPAL SLUDGE
Lab ID: 1406115-01A
Client Sample ID: SLUDGE STORAGE TANK

Collection Date: 6/2/2014 9:50:00 AM
Date Received: 6/2/2014
Matrix: Solid
Site ID:

Analysis	Result	PQL	MCL	Qual	Units	PrepDate	Date Analyzed
PERCENT MOISTURE		Method: SM2540 B-1997					Analyst: KR
Percent Moisture	96	0.50	NA		wt%		6/4/2014 4:07 PM
PCBS		Method: SW8082A (2/07)			SW3550B		Analyst: NC
Aroclor 1016	ND	0.0167	NA		mg/Kg	6/3/2014 1:20 PM	6/3/2014 7:13 PM
Aroclor 1221	ND	0.0167	NA		mg/Kg	6/3/2014 1:20 PM	6/3/2014 7:13 PM
Aroclor 1232	ND	0.0167	NA		mg/Kg	6/3/2014 1:20 PM	6/3/2014 7:13 PM
Aroclor 1242	ND	0.0167	NA		mg/Kg	6/3/2014 1:20 PM	6/3/2014 7:13 PM
Aroclor 1248	ND	0.0167	NA		mg/Kg	6/3/2014 1:20 PM	6/3/2014 7:13 PM
Aroclor 1254	ND	0.0167	NA		mg/Kg	6/3/2014 1:20 PM	6/3/2014 7:13 PM
Aroclor 1260	ND	0.0167	NA		mg/Kg	6/3/2014 1:20 PM	6/3/2014 7:13 PM
Sum: Tetrachloro-m-xylene	81.3	32.8-150	NA		%REC	6/3/2014 1:20 PM	6/3/2014 7:13 PM

Notes:

Matrix spike exceeds REIC control limits.

www.ammara.com



www.a-l-eastern.com

A&L Eastern Laboratories, Inc.

1001 Whitcomb Road Richmond, Virginia 23237 (804) 743-5401 Fax (804) 270-0445

6/6/2014

CITY OF LEXINGTON VA
JOAN BIGGS
WASTEWATER PLANT
135 BOB AKINS CIR
LEXINGTON, VA, 24450

Ref: Analytical Testing
Report Number: 14-154-0213
Project Description: CITY OF LEXINGTON/PCB'S(55340)

Dear JOAN BIGGS:

A&L Eastern Laboratories received sample(s) on 6/3/2014 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and /or 40 CFR part 136.

The EPA requires that water samples analyzed for pH, dissolved oxygen and total residual chlorine be analyzed in the field. Analyses and results reported which do not indicate "Field" for these parameters were analyzed outside the holding time as specified in Table II of 40 CFR Part 136.3.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, instrumentation maintenance and calibration were performed in accordance with guidelines established by the USEPA and NELAP.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Pauric McGroary
Agronomist

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.

Alabama #40750
Arkansas #88-0650
Illinois #200015
Kentucky #90047
Kentucky UST #41

Louisiana #04015
Mississippi
Oklahoma #9311
Tennessee #02027
Virginia #00106

Florida #E87943
Pennsylvania #68-3195
USDA #S-46279
EPA #TN00012
NELAP #100456

California #05240CA
Texas #T104704180-05-TX





www.aleastern.com

A&L Eastern Laboratories

7821 Whitepine Road Richmond, Virginia 23237 (804) 763-9401 Fax (804) 271-8448

Sample Summary Table

Report Number: 14-154-0213

Client Project Description: CITY OF LEXINGTON/PCB'S(55340)

Lab No	Client Sample ID	Matrix	Date Collected	Date Received	Method	Lab ID
55727	CITY OF LEXINGTON #1	Solids	06/02/2014 09:50	06/03/2014	8082	ETC
55727	CITY OF LEXINGTON #1	Solids	06/02/2014 09:50	06/03/2014	SM-2540G	ETC

ETC: Environmental Testing and Consulting, Inc., Memphis, TN, Certification: #1354



www.aaleastern.com

A&L Eastern Laboratories

7621 Whiteline Road Richmond, Virginia 23237 (804) 743-8401 Fax (804) 271-6446

70712

CITY OF LEXINGTON VA
JOAN BIGGS
WASTEWATER PLANT
135 BOB AKINS CIR
LEXINGTON, VA 24450

JOAN BIGGS

Project CITY OF LEXINGTON/PCB'S(55340)
Information :

Report Date : 06/06/2014

Received : 6/3/2014

Paulie McGroary

Submitted By : JOAN BIGGS

Report Number : 14-154-0213

REPORT OF ANALYSIS

Paulie McGroary
Agronomist

Lab No : 55727

Matrix: Solids

Sample ID : CITY OF LEXINGTON #1

Sampled: 6/2/2014 9:50

Total Solids	4.42	%	0.010	1	06/05/14 08:41	ALP	SM-2540G
Moisture	95.6	%	0.100	1	06/05/14 08:41	ALP	SM-2540G

Analytical Method: 8082

Prep Method: 3546

Prep Batch(es): L201187

Date/Time Prepped: 6/4/2014 13:30:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Aroclor 1016	<2.05	mg/Kg - dry	2.05	1	06/04/14 17:45	VIC	L201301
Aroclor 1221	<2.05	mg/Kg - dry	2.05	1	06/04/14 17:45	VIC	L201301
Aroclor 1232	<2.05	mg/Kg - dry	2.05	1	06/04/14 17:45	VIC	L201301
Aroclor 1242	<2.05	mg/Kg - dry	2.05	1	06/04/14 17:45	VIC	L201301
Aroclor 1248	<2.05	mg/Kg - dry	2.05	1	06/04/14 17:45	VIC	L201301
Aroclor 1254	<2.05	mg/Kg - dry	2.05	1	06/04/14 17:45	VIC	L201301
Aroclor 1260	<2.05	mg/Kg - dry	2.05	1	06/04/14 17:45	VIC	L201301

Surrogate: Decachlorobiphenyl	42.6	Limits: 25-125%	1	06/04/14 17:45	VIC	L201301
-------------------------------	------	-----------------	---	----------------	-----	---------

Surrogate: Tetrachloro-m-xylene	53.3	Limits: 25-125%	1	06/04/14 17:45	VIC	L201301
---------------------------------	------	-----------------	---	----------------	-----	---------

Qualifiers/ Definitions

*	Outside QC limit	B	Analyte detected in blank
C	GCMS Confirmation Analysis	E	Exceeds calibration range
g	GGA outside QC limits	H	Beyond holding time
J	Estimated Value	M	Minimum value
NA	Not on Scope of Accreditation	NC	Not confirmed
Q	Surrogate Recovery	T	Sample exhibits toxicity
U	Unconfirmed		



SAMPLE TRANSMITTAL

A&L East

7621 Whitepine Road/Richmond VA 23237

Tel: 804-743-940

Customer Inter



CITY OF LEXINGTON VA
CITY OF LEXINGTON/PCBS/65340

14-154-0213
70712
06-03-2014
13:08:44

Account #
70712

Submitted By	City of Lexington	Copy To
Joan Biggs	WWTP	Joan Biggs
	135 Bob Alkins Circle	
	Lexington VA 24450	

Sample ID	Lab Number (Lab Use Only)	Collection Information			Container Information			Please Check Desired Tests										
		Type	Date	Time	Number of Bottles	Type	Volume	SL1	SL2	603 Metals	Nitrogen Series	nit	GCE	Ag	Cr	Trace Solids	Others	
#1	55340	✓ Grab	6/4/14	0950	1	✓ Glass	oz											PCB's ONLY
		Composite				Plastic	pint											
		Grab					oz											
		Composite				Plastic	pint											
		Grab					oz											
		Composite				Plastic	pint											
		Grab					oz											
		Composite				Plastic	pint											
		Grab					oz											
		Composite				Plastic	pint											

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time
	6/4/14	1230			
URS/2401862039833	5234	6/3/14	10:30		

Sampled by:
Ervin Buchanan/jle

Test Package Details
SL1: Total Solids (Moisture) Total Kjeldahl Nitrogen, Phosphorus and Potassium
SL2: Basic Test SL1 plus Sulfur, Calcium, Magnesium, Sodium, Iron, Aluminum, Manganese, Copper And Zinc
603 Metals: Arsenic, Cadmium, Chromium, Mercury, Molybdenum, Lead, Nickel, Selenium.
(Copper & Zinc included in SL2)
Nitrogen Series: Total Kjeldahl, Ammonium, Nitrate & Organic Nitrogen.
GCE: Calcium Carbonate Equivalent or Total neutralization Value (For Lime Treated Sludge)

Special Instructions or Remarks
Report dry wt basis
(Part 563 Biosolids)
Re-test on Report 14-133-0214 (PCB)
120 CHARGE (Randy Thomas)

Temp below 6°C

Sample # 55340
Rush

Brandi Watson - City of Lexington WWTP CN 70712

From: Randy Thomas
To: Brandi Watson; Kathy Scott
Date: 6/2/2014 11:10 AM
Subject: City of Lexington WWTP CN 70712
CC: Mike



14-154-0213
70712
06-03-2014
13:08:44

Kathy,

The City of Lexington is sending in a retest sludge sample for PCB analysis. The sample is rush and it will be no charge due to laboratory contamination on the previous sample. The sample will need to be reported on a dry weight basis.

Thanks

Randy Thomas

Showman, Keith (DEQ)

From: joan biggs [jbiggs46@yahoo.com]
Sent: Friday, May 30, 2014 2:07 PM
To: Showman, Keith (DEQ); Carver, Beverley (DEQ)
Cc: Fred Schultz
Subject: Fw: Sample #55340 PCB Analysis

Joan Biggs
Lab Specialist
Lexington-Rockbridge Regional WQCF, VA 0088161
135 Bob Akins Circle
Lexington, VA 24450
Phone: 540-463-5936 (2)

--- On Fri, 5/30/14, Randy Thomas <rthomas@etcmemphis.com> wrote:

> From: Randy Thomas <rthomas@etcmemphis.com>
> Subject: Sample #55340 PCB Analysis
> To: "joan biggs" <jbiggs46@yahoo.com>
> Date: Friday, May 30, 2014, 2:04 PM
>
>
> Ms. Biggs,
>
>
> After review of the raw data and batch QC, we feel that the result
> reported for sample #55340is was in error.
> It is believed that the positive result reported was due to carryover
> from a sample analyzed prior to 55340, that contained percent levels
> of Aroclor 1242. Sample 55340 was re-extracted (outside the 14 day
> holding time) and re-analyzed. The re-analysis did not indicate any
> PCBs to be present in the sample.
>
> If this sample can be re-sampled, the laboratory will analyze the
> replacement on a rush basis, at no charge.
>
> Sorry for the inconvenience. Please let me know if I need to do
> anything esle.
>
> Thank you.
>
> Randy Thomas
> 901-213-2429



A&L Eastern Laboratories, Inc.

7021 W. Main Road, Richmond, Virginia 23217 (804) 743-5401 Fax (804) 275-6445

www.al-labs.com

5/28/2014

CITY OF LEXINGTON VA
JOAN BIGGS
WASTEWATER PLANT
135 BOB AKINS CIR
LEXINGTON, VA, 24450

Ref: Analytical Testing
Report Number: 14-133-0214
Project Description: CITY OF LEXINGTON/PCB'S

Dear JOAN BIGGS:

A&L Eastern Laboratories received sample(s) on 5/13/2014 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and /or 40 CFR part 136.

The EPA requires that water samples analyzed for pH, dissolved oxygen and total residual chlorine be analyzed in the field. Analyses and results reported which do not indicate "Field" for these parameters were analyzed outside the holding time as specified in Table II of 40 CFR Part 136.3.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, instrumentation maintenance and calibration were performed in accordance with guidelines established by the USEPA and NELAP.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Pauric McGroary
Agronomist

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.

Alabama	#40750	Louisiana	#04015	Florida	#E87943	California	#05240CA
Arkansas	#88-0650	Mississippi		Pennsylvania	#68-3195	Texas	#T104704180-05-TX
Illinois	#200015	Oklahoma	#9311	USDA	#S-46279		
Kentucky	#90047	Tennessee	#02027	EPA	#TN00012		
Kentucky UST	#41	Virginia	#00106	NELAP	#100456		





A&L Eastern Laboratories

7821 Whitepine Road Richmond, Virginia 23237 (804) 743-8401 Fax (804) 271-6448

Sample Summary Table

Report Number: 14-133-0214

Client Project Description: CITY OF LEXINGTON/PCB'S

Lab No	Client Sample ID	Matrix	Date Collected	Date Received	Method	Lab ID
55340	#2	Solids	05/12/2014 07:08	05/13/2014	8082	ETC
55340	#2	Solids	05/12/2014 07:08	05/13/2014	SM-2540G	ALE

ALE: A&L Eastern Laboratories, Certification: 460014

ETC: Environmental Testing and Consulting, Inc., Memphis, TN, Certification: #1354



www.aalestern.com

A&L Eastern Laboratories

7621 Whiteline Road Richmond, Virginia 23237 (804) 743-8481 Fax (804) 271-6446

70712

CITY OF LEXINGTON VA
JOAN BIGGS
WASTEWATER PLANT
135 BOB AKINS CIR
LEXINGTON, VA 24450

JOAN BIGGS

Project CITY OF LEXINGTON/PCB'S
Information :

Report Date : 05/28/2014

Received : 5/13/2014

Pauric McGeary

Submitted By : JOAN BIGGS

Report Number : 14-133-0214

REPORT OF ANALYSIS

Pauric McGroary
Agronomist

Lab No : 55340

Sample ID : #2

Matrix: Solids

Sampled: 5/12/2014 7:08

Total Solids	4.23	%	4	1	JRF	SM-2540G
Moisture	95.77	%		1		SM-2540G

Analytical Method: 8082

Prep Method: 3546

Prep Batch(es): L199438

Date/Time Prepped: 5/19/2014 09:00:00

Test	Results	Units	ML	DF	Date / Time Analyzed	By	Analytical Batch
Aroclor 1016	<2.04	mg/Kg - dry	2.04	1	05/19/14 18:12	VIC	L199631
Aroclor 1221	<2.04	mg/Kg - dry	2.04	1	05/19/14 18:12	VIC	L199631
Aroclor 1232	<2.04	mg/Kg - dry	2.04	1	05/19/14 18:12	VIC	L199631
Aroclor 1242	307	mg/Kg - dry	20.4	10	05/20/14 10:10	VIC	L199631
Aroclor 1248	<2.04	mg/Kg - dry	2.04	1	05/19/14 18:12	VIC	L199631
Aroclor 1254	<2.04	mg/Kg - dry	2.04	1	05/19/14 18:12	VIC	L199631
Aroclor 1260	<2.04	mg/Kg - dry	2.04	1	05/19/14 18:12	VIC	L199631
Surrogate: Decachlorobiphenyl	36.3		Limits: 25-125%	1	05/19/14 18:12	VIC	L199631
Surrogate: Tetrachloro-m-xylene	49.8		Limits: 25-125%	1	05/19/14 18:12	VIC	L199631

Qualifiers/ Definitions

*	Outside QC limit	B	Analyte detected in blank
C	GCMS Confirmation Analysis	E	Exceeds calibration range
g	GGA outside QC limits	H	Beyond holding time
J	Estimated Value	M	Minimum value
NA	Not on Scope of Accreditation	NC	Not confirmed
Q	Surrogate Recovery	T	Sample exhibits toxicity
U	Unconfirmed		



www.aalestern.com

A&L Eastern Laboratories

7621 Whitepine Road, Richmond, Virginia 23227 Phone: (804) 743-9401 Fax: (804) 271-0446

05/13/2014 13:14:35

Export Batch Report

Export Batch Id: 769EXP

Created: 5/13/2014 13:14:24

Computer: ALE-RECVING

User: Brandi Watson

Page 1 of 1

To: Environmental Testing and Consulting, Inc.

2790 Whitten Road

Memphis, TN 38133

901-213-2400

From: A&L Eastern Laboratories

7621 Whitepine Rd.

Richmond, VA 23237

(804) 743-9401

Report No Sample Date Rush Lab No Method No

14-133-0214 05/12/2014 07:08 55340 SW-8082

Fee Code Description

Total Polychlorinated Biphenyls (PCBs)

CITY OF LEXINGTON VA
CITY OF LEXINGTON POLS

14-133-0214
05-13-2014
13:08:52

Sampled By	Method of Shipment	Blank / Cooler Temp.
Remarks		
Relinquished By (sign)	Date / Time	Received By (sign) Date /
Relinquished By (sign)	Date / Time	Received By (sign) Date /



SAMPLE TRANSMITTAL

A&L Env

7621 Whitestone Road, Richmond, VA 23237

Tel: 804-743-9

CITY OF LEXINGTON VA
CITY OF LEXINGTON/PCB'S14-133-0214
70712
05-13-2014
10:09:52

ACCOUNT #

70712

Submitted By	Charge To	Copy To
Joan Biggs	City of Lexington	Joan Biggs
	WUSTF	
	135 Bob Allen Circle	

Lexington VA 24450

UPU-1822 (charge to)

Sample Information		Please Check Desired Tests																
Sample ID	Lab Number (Lab Use Only)	Type	Date	Time	Number of Bottles	Type	Volume	SL1	SL2	603 Metals	Nitrogen Series	PH	Alk. CCE	AN	Cl	Volatile Solids	Others	
#1		Grab 4G-C Composite	5/6/14	1115 1332	1	Glass Plastic	02 pint	✓	✓	✓	✓	✓	✓				✓	
#2	55840	Grab Composite	5/12/14	0708	1	Glass Plastic	02 pint											PCBs
		Grab Composite				Glass Plastic	02 pint											
		Grab Composite				Glass Plastic	02 pint											
		Grab Composite				Glass Plastic	02 pint											

Relinquished By: (Signature)	Date	Time	Received By: (Signature)	Date	Time
<i>Joan Biggs</i>	5-12-14	0720			
UPS 1740T862039172027	5/13/14	11:45	<i>RS</i>		

Test Package Details	Special Instructions or Remarks
SL1: Total Solids (Moisture) Total Kjeldahl Nitrogen, Phosphorus and Potassium SL2: Basic Test SL1 plus Sulfur, Calcium, Magnesium, Sodium, Iron, Aluminum, Manganese, Copper and Zinc 603 Metals: Arsenic, Cadmium, Chromium, Mercury, Molybdenum, Lead, Nickel, Selenium (Copper & Zinc included in SL2) Nitrogen Series: Total Kjeldahl, Ammonium, Nitrate & Organic Nitrogen CCE: Calcium Carbonate Equivalent or Total Neutralization Value (For Lime Treated Sludge)	Report dry wt. basis * SL2 all of SL plus copper + zinc ** CCE as CaCO ₃ to Previous Report 2013 13-127-02 DD (should include same parameters as 2013)